APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,944	09/15/2005	Toshiharu Yanagida	SONYJP 3.3-1026	7565

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EXAMINER
KOVAL, MELISSA J

ART UNIT	PAPER NUMBER
2862	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)	
Office Action Summary	10/526,944	YANAGIDA ET AL.	
	Examiner	Art Unit	
	MELISSA J. KOVAL	2862	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>21 December 2007</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-12</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-12</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>08 March 2005</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

        1.☒ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Priority

1.   Applicant cannot rely upon the foreign priority papers to overcome this rejection

because a translation of said papers has not been made of record in accordance with

37 CFR 1.55. See MPEP § 201.15. This applies to the rejection set forth under 35

U.S.C. 102 (e) below.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3.   Claims 1, 2, 7 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by

Hori U.S. Patent 5,739,850.

See Figures 1 through 3, for example.

FIG. 1

FIG. 2

703~ **FLASH ROM**

702~ **PROGRAM RAM**

201 — **EXPANSION BUS I/F**

TO CAMERA

RISC CPU ~701

203~ **IMAGE SIGNAL PROCESSOR**

204~ **THINNED-OUT PROCESSOR**

111

610 — **D/A CONVERTER**

205~ **BUFFER MEMORY**

609 — **VIDEO ENCODER**

TO CAMERA

ANALOG IMAGE SIGNAL

608~ **ANIMATION COMPRESSION AND EXPANSION CIRCUIT**

206~ **BUS CONTROLLER**

TO PERSONAL COMPUTER

207~ **EXTERMINAL I/F CONTROLLER**

FROM CAMERA

611 — **A/D CONVERTER**

ANALOG SOUND SIGNAL

D/A CONVERTER

TO CAMERA

612

FIG. 3

```
                    ┌─────────────┐
                    │    START    │── S201
                    └──────┬──────┘
                           │
              ┌────────────┴────────────┐
              │ START PICKING-UP AN IMAGE. │── S202
              └────────────┬────────────┘
                           │
              ┌────────────┴────────────┐
              │     CONTROLS LENSES.    │── S203
              └────────────┬────────────┘
                           │
              ┌────────────┴────────────┐
              │  CHARACTER RECOGNITION  │── S204
              └────────────┬────────────┘
                           │
                    ╱──────┴──────╲
                  ╱   RECOGNITION   ╲      NO      ┌──────────────┐
                 ╱ RATIO OVER PREDETERMINED╲──────────│ CHANGE SET-UP │── S206
                 ╲     VALUE?      ╱  S205            │ CONDITIONS OF │
                  ╲──────┬──────╱                     │    CAMERA.    │
                     YES │                            └──────────────┘
                    ╱────┴────╲
          NO      ╱    ALL      ╲
      ┌──────────╱  THE CHARACTERS ╲  S207
      │          ╲  RECOGNIZED?   ╱
 ┌────┴─────┐     ╲──────┬──────╱
 │  SOUND   │── S208  YES│
 │RECOGNITION│        ┌───┴──────────────┐
 └────┬─────┘        │ STORE CHARACTER DATA. │── S210
 ┌────┴─────┐        └───────┬──────────┘
 │ CORRECT  │                │
 │UNRECOGNIZED│── S209   ╱────┴────╲
 │ CHARACTER.│         ╱    ANY      ╲
 └──────────┘    NO  ╱  NON-COMMON    ╲ S211
              ──────╱ CHARACTER IN THE STORED╲
                    ╲   CHARACTER    ╱
                     ╲    DATA?     ╱
                      ╲─────┬─────╱
                         YES│
                    ┌───────┴──────────┐
                    │ EXTRACT NON-COMMON │── S212
                    │    CHARACTERS.     │
                    └───────┬──────────┘
                    ┌───────┴──────────┐
                    │ RECORD CHARACTER DATA. │── S213
                    └───────┬──────────┘
              YES    ╱──────┴──────╲
          ┌─────────╱   CONTINUE     ╲ S214
          │         ╲   CHARACTER    ╱
          │          ╲ RECOGNITION? ╱
          │           ╲─────┬─────╱
          │              NO │
          │          ┌──────┴──────┐
          │          │     END     │── S215
          │          └─────────────┘
```
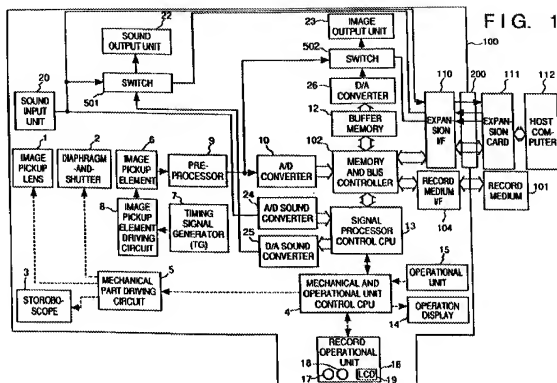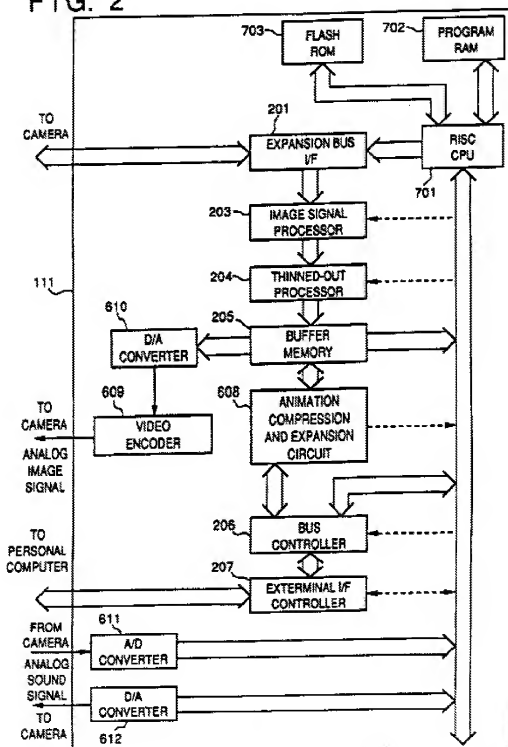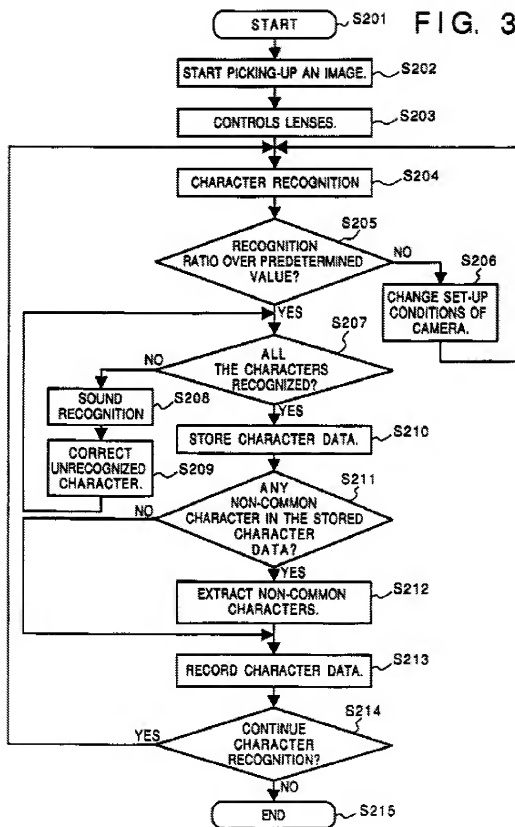
Expansion card 111 comprises control means including a CPU 701 and image signal

processor 203.

See column 6, lines 15 through 67, and column 7, lines 1 through 29.

In FIG. 2, a RISC CPU 701 is a Reduced Instruction Set Computer (RISC) processor capable of high speed operation, and a program RAM 702 is a RAM for storing an operational program for the RISC CPU 701. further, a flash ROM 703 is a lump erasing type ROM for storing Basic Input/Output System (BIOS) of the RISC CPU 701. The RISC CPU 701 interchanges data with the expansion I/F 110 of the camera 100 by using an expansion bus I/F 201 via the connector 200. Further, the RISC CPU 701 outputs a digital image signal from the camera 100 which is transmitted via the expansion bus I/F 201 to a image signal processor 203. The digital image signal is converted into a standard component video signal (e.g., a RGB signal) in the image signal processor 203. then outputted to a thinning-out processor 204. After the converted signals are thinned-out (to one-eighth of the original image in horizontal and vertical directions, for instance). the thinning-out processor 204 transfers signals to a buffer memory 205. The image signals temporarily stored in the buffer memory 205 are transmitted to a video encoder 609 via a D/A converter 610. then outputted to the camera 100 as analog signals by following control instructions from the CPU 701. Meanwhile. the buffer memory 205 transfers the image data to an animation compression/expansion circuit 608 in accordance with a control instruction from the CPU 701. At the animation compression/expansion circuit 608. the image data is compressed or expanded as needed. then transmitted to a bus controller 206. The bus controller 206 transfers the compressed or expanded image data to a device having a monitor, such as a personal computer, via an external I/F controller 207 in accordance with a control instruction from the RISC CPU 701. Accordingly, a user can confirm an image to be recorded as an animation on a monitor. An A/D converter 611 converts an image or sound signal inputted from the camera 100 into digital signals, and transfers the signal to the RISC CPU 701, whereas, a D/A converter 612 converts a signal from the RISC CPU 701 to analog signals. then transmits it to the camera 100 as an analog sound signal.

Next, an operation of the embodiment will be described with reference to FIGS. 1 and 2.

In the embodiment, the record medium 101 storing a program in BIOS level for RISC CPU 701 is attached to the camera 100 in FIG. 1. and the expansion card 111 is also attached to the camera 100 via the connector 200. Then, the content of the record medium 101 is transmitted to the expansion card 111 via the record medium I/F 104 and the expansion I/F 110. whose operations are controlled by the bus controller 102. At the expansion card 111, the program data transmitted from the camera 100 under control of the RISC CPU 701 is written to the flash ROM via the expansion bus interface 201. Accordingly, functions and capacity of the digital electronic camera, when the expansion card is attached to it, can be changed in the BIOS level, thus the

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functions of the camera can be dramatically increased with-
out buying another camera for adding new functions.

Then, the record medium 101 storing an application
program to be executed by the RISC CPU 701 is attached.
This application program is also written to the program
RAM 702 of the expansion card via the expansion bus, in the
same manner as above.

As explained above, it is possible to executes various
kinds of application programs on the digital electronic
camera by changing application programs. In other words,
by attaching the expansion card, it is possible to perform an
operation such as to monitor an image based on image
signals and to record sound signals and image signals from
the camera simultaneously as well as to perform more
sophisticated operations in accordance with the content
written in the program RAM 702 and the flash ROM 703.

As programs to be written in the program RAM, there
exist various kinds of programs, such as a translation
program, a program for image recognition and image com-
position. Further, the record medium 101 to be connected
with the camera 100 is used as a supplier of a processing
program and BIOS in this embodiment, however, those can
be supplied from a information processing device, such as a
personal computer, via a Small Computer System Interface
(SCSI) bus of the expansion card. Furthermore, the RISC
CPU is used as a processor capable of performing high speed
operation, however, other processors, such as Complex
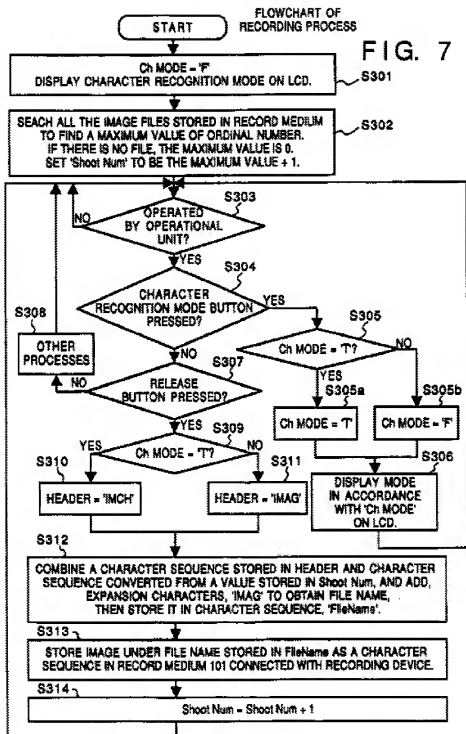Instruction Set Computer (CISU) CPU, can replace it.

Claim 1 sets forth: "The image pickup apparatus comprising:

photographic means for photographing a subject (camera 100);

directory creation means for creating directories according

to shooting situations selected from multiple predetermined

types of shooting situations (In '850 the directory or sub directory is identified by a file

name for each mode. See column 11, lines 60 through 65. See Figures 6 through 9.) ;

FLOWCHART OF
RECORDING PROCESS

START

FIG. 7

Ch MODE = 'F'
DISPLAY CHARACTER RECOGNITION MODE ON LCD. — S301

SEACH ALL THE IMAGE FILES STORED IN RECORD MEDIUM — S302
TO FIND A MAXIMUM VALUE OF ORDINAL NUMBER.
IF THERE IS NO FILE, THE MAXIMUM VALUE IS 0.
SET 'Shoot Num' TO BE THE MAXIMUM VALUE + 1.

S303
OPERATED
BY OPERATIONAL
UNIT?

NO

YES   S304
CHARACTER
RECOGNITION MODE BUTTON
PRESSED?

YES

S308   NO   S305
OTHER   Ch MODE = 'T'?   NO
PROCESSES
              S307   YES
         NO   RELEASE   S305a   S305b
              BUTTON PRESSED?
                                Ch MODE = 'T'   Ch MODE = 'F'
         YES S309
S310   Ch MODE = 'T'?   NO   S311   S306
YES   DISPLAY MODE
                                              IN ACCORDANCE
HEADER = 'IMCH'   HEADER = 'IMAG'   WITH 'Ch MODE'
                                              ON LCD.
S312
COMBINE A CHARACTER SEQUENCE STORED IN HEADER AND CHARACTER
SEQUENCE CONVERTED FROM A VALUE STORED IN Shoot Num, AND ADD,
EXPANSION CHARACTERS, 'IMAG' TO OBTAIN FILE NAME,
THEN STORE IT IN CHARACTER SEQUENCE, 'FileName'.

S313
STORE IMAGE UNDER FILE NAME STORED IN FileName AS A CHARACTER
SEQUENCE IN RECORD MEDIUM 101 CONNECTED WITH RECORDING DEVICE.

S314
Shoot Num = Shoot Num + 1

assigning means for assigning image data produced by the

photographic means as a result of photography to the directories

according to the selected shooting situations (Thinning-out processor 204 transfers

signals buffer memory 205.) ;

attaching means for attaching identification information to

the image data according to the selected shooting situations (See column 8, lines 57

through 67, and column 9, lines 1 through 28.).;

When the release button 17 of the record operational unit
16 is pressed while the character pickup mode is not set, the
camera records an image under an file name composed of an
ordinal number placed after "IMAG", for example. An
alternative way to name a file is to add an expansion letters,
such as ".IMAG", to emphasis that the file is an image file.
In this way, as more images are picked-up, files of images
are named as "IMAG0001.IMAG", "IMAG0002.IMAG",
"IMCAG0003.IMAG", "IMAG0004.IMAG", and so on.
Where the release button 17 of the record operational unit 16
is pressed while the character pickup mode is set, the camera

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records an image under an file name composed of an ordinal number placed after "IMCH", for example. According to this way, as more images are picked-up, files of images are named as "IMCH0001.IMAG", "IMCH0002.IMAG", "IMCH0003.IMAG", "IMCH0004.IMAG", and so on. It should be noted that the respective ordinal numbers can be separately added at each end of "IMAG" and "IMCH", or can be placed in picked-up order regardless of the kinds of the files.

As described above, files are stored under distinguishable file names, and flags indicative of the existence of the character mode in the files are inserted in the file. The data in the files are stored in proper area in various data formats, such as formats of TIFF and JPEG. For example, in a JPEG data format, there is a field for storing information characterized by application, such as character recognition and character pickup.

More specifically, as shown in FIG. 6, at the end of the application segment marker code APP0, there are added data which indicates a segment length (a segment length excluding a marker code and a length of segment length itself, three bytes in the embodiment) and an ASCII character segment, such as two characters, "C" and "H", and a character "T" or "F" indicating "on" or "off". When a personal computer is used to search a file, the flag of the segment can be checked to determine whether or not to perform character recognition. This method is programmed in the signal processor control CPU 13 in FIG. 1.

and

storage means for storing the image data to which the

identification information is attached, together with an

application program of one or more specified applications, so as

to associate the image data with the applications (RAM 702 and ROM 703).

With respect to Claim 2, the Flowcharts describe a sequential process.

Claims 7 and 8 correlate with claims 1 and 2, respectively.

Response to Arguments

4.   Applicant's arguments filed December 21, 2007 have been fully considered but they are not persuasive. The rejection of the Office Action of August 8, 2007 is repeated below for applicant's convenience. The examiner's remarks follow:

5.   Claims 1 through 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Nakami U.S. Patent Application Publication US 2004/0141069 A1.

Refer to all embodiments and Figures.

Claim 1 sets forth: "The image pickup apparatus comprising:

photographic means for photographing a subject (digital still camera 12);

directory creation means for creating directories according to shooting situations selected from multiple predetermined types of shooting situations (Directories are first mentioned with respect to the fourth embodiment in sections [0035] and [0036]. Also consider the PC. The memory card MC referred to in section [0066] could serve to store many formats, JPEG, TIFF, RAW, BMP and GIF. And see Figures 2 and 9 through 11, for example.);

assigning means for assigning image data produced by the photographic means as a result of photography to the directories according to the selected shooting situations (See TAGS 2060 and Figure 8.);

attaching means for attaching identification information to the image data

according to the selected shooting situations (See Applications APP0-2 and APP6, for

example, as they correlate with Exit Tags.); and

storage means for storing the image data to which the identification information is

attached, together with an application program of one or more specified applications so

as to associate the image data with the applications (See sections [0073] through

[0075]. More flowcharts are shown in Figures 12 through 14.)."

With respect to claims 2, 3, 5, 6 and 8 through 12, the limitations following

"wherein" are interpreted as defining functional language and do not further limit the

claim language of either dependent claim. See MPEP 2114. Said claims are rejected for

the same reasons already applied to rejected claim 1.

Furthermore:

Claim 2 sets forth: "The image pickup apparatus according to claim 1, wherein,

when desired ones of the shooting situations are selected, the assigning means assigns

all image data obtained sequentially as a result of photography by the photographic

means to directories corresponding to the shooting situations." Sequential processing is

discussed in sections [0031] and [0032]. Also see the GI data of Figure 6 and sections

[0079] and [0080].

assigning means for assigning image data produced by the photographic means

as a result of photography to the directories according to the selected shooting

situations (See TAGS 2060 and Figure 8.);

attaching means for attaching identification information to the image data

according to the selected shooting situations (See Applications APP0-2 and APP6, for

example, as they correlate with Exit Tags.); and

storage means for storing the image data to which the identification information is

attached, together with an application program of one or more specified applications so

as to associate the image data with the applications (See sections [0073] through

[0075]. More flowcharts are shown in Figures 12 through 14.)."

With respect to claims 2, 3, 5, 6 and 8 through 12, the limitations following

"wherein" are interpreted as defining functional language and do not further limit the

claim language of either dependent claim. See MPEP 2114. Said claims are rejected for

the same reasons already applied to rejected claim 1.

Furthermore:

Claim 2 sets forth: "The image pickup apparatus according to claim 1, wherein,

when desired ones of the shooting situations are selected, the assigning means assigns

all image data obtained sequentially as a result of photography by the photographic

means to directories corresponding to the shooting situations." Sequential processing is

discussed in sections [0031] and [0032]. Also see the GI data of Figure 6 and sections

[0079] and [0080].

With respect to claims 3 and 4, a selection process is discussed in sections

[0124] and [0125]. See thumbnail image data shown in Figure 7 and mentioned in

section [0082]. Other thumbnail images are described throughout the teaching. A

thumbnail is selected by the user and appears in synchronization with the selection. The

user also selects a printed image.

With respect to claim 5, section [0129] suggests that a printed image includes

information describing the time the image was obtained. Tags relating to time and date

are shown in Figure 8, for example.

With respect to claim 6, many of the tags could be used to describe location as

well as the marker note 2060c as shown in Figure 8.

The method steps described in claims 7 through 12 are met for the reasons

already applied in the rejections above. Again, see the flowcharts.

Examiner's Remarks

6.   On page 5 of applicant's remarks, Applicant states:

> "Applicants' invention as recited in the independent
> claims is directed toward an image pickup apparatus and a
> recording method. Each of the claims recites "storing [image
> data] together with an application program of one or more
> specified applications, so as to associate the image data with
> the applications." By associating image data with one or more
> application programs, the invention provides a user with more
> efficient access to application programs that the user desires
> to use with the image data. (See e.g., Specification page 22,
> lines 6-12.) For example, a user may store image data classified
> by "shooting situation" together with a "photo diary"
> application, in which case the image data and classification are
> automatically captured by the photo diary program when the
> program is executed. (See e.g., Specification page 16, line 3 -
> page 17, line 25.)"

7.   In response to applicant's argument that the references fail to show certain

features of applicant's invention, it is noted that the features upon which applicant relies

(i.e., "storing [image data] together with an application program of one or more specified

applications, so as to associate the image data with the applications." Nor is the

limitation "photo diary" used in combination with the limitation "shooting situation" in any

of the claims.) are not recited in the rejected claim(s). Although the claims are

interpreted in light of the specification, limitations from the specification are not read into

the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The concept that applicant refers to above "one or more specified applications" allows

for a single application. Nakami '069 allows for at least one application, as described in

the body of the rejection.

Similarly, a lack of recitation in the claim(s) of features relied upon in applicant's

arguments applies to applicant's remarks set forth at the top of page 6, as follows:

> "The Examiner cites Nakami's sections [0073]-[0075] and
> Figs. 12-14 as disclosing "storing [image data] together with an
> application program of one or more specified applications, so as
> to associate the image data with the applications." (official
> action page 3, lines 7-10. However, careful examination of
> Nakami's sections [0073]-[0075] reveals that Nakami does not
> disclose storing image data with an application program, but
> rather, discloses subdividing a storage file into "application
> marker segments." (See e.g. Nakami section [0073], lines 1-8;
> and Fig. 3.) Such "application marker segments" are not
> application programs. That is, the segments merely denote
> portions of a file and do not include an executable set of
> instructions as would an application program. Furthermore,
> Applicants note that Nakami's Figs. 12-14 depict the steps taken
> in image quality adjustment processes and do not show any
> storage of image data with an application program.""

 Any patentable distinction between applicant's claimed "application programs" and the "application marker segments" of Nakami '069 is not clear from the claim language.

The tagging of an image file with TIFF, GI or JPEG, for example, requires a complete application. Nowhere in the Nakami '069 teaching does the examiner find a suggestion that application markers are derived from an incomplete program.

Applicant makes no further arguments against the rejection of the dependent claims except to state that they "inherit the limitations of their respective base claims".

For the reasons stated above, the examiner asserts that rejection is proper and should be maintained.

Conclusion

        Any inquiry concerning this communication or earlier communications from the examiner should be directed to MELISSA J. KOVAL whose telephone number is (571) 272-2121. The examiner can normally be reached on Monday through Friday.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Assouad can be reached on 571-272-2210. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MELISSA J KOVAL/   MELISSA J KOVAL
Primary Examiner, Art Unit 2862   Primary Examiner
                                                     Art Unit 2862

MJK